

Report to the Governor and Legislature  
**Establishing School-Level Graduation and Attendance Rates**  
For Implementation of School Accountability  
(As required by the Public Schools Accountability Act of 1999)

California Department of Education  
September 10, 1999

# **Establishing School-Level Graduation and Attendance Rates**

## **Table of Contents**

<b>Summary of Findings and Recommendations</b>	<b>1</b>
Findings	1
Recommendations	1
<b>Rationale for Recommendations</b>	<b>3</b>
Current Availability of Data	3
Use of Student-Level Data	4
Coordination with CSIS	4
Experience of Other States	5
<b>Implementation of Recommendations</b>	<b>7</b>
Graduation Rate: Definition	7
Graduation Rate: Time Line	8
Student Attendance Rate: Definition	8
Student Attendance Rate: Time Line	9
Staff Attendance Rate: Definition	9
Staff Attendance Rate: Time Line	10
<b>Audit of Data</b>	<b>11</b>
<b>Appendix A: Principles for Establishing a High School Graduation Rate</b>	<b>12</b>
Principles Related to Determining the Number of Graduates	12
Principles Related to Determining the Number of Potential Graduates	12
<b>Appendix B: Application of the Principles to Create Multiple Graduation Rates</b>	<b>15</b>
High School Graduation Rate	15
High School Completion Rate	15
District Graduation and Completion Rates for Special Population Students	15
District Graduation and Completion Rates for Late Entry Students	16
<b>Appendix C: Application of the Principles to Create Rules for Counting Students in the Graduation Rate</b>	<b>17</b>
Establishing Rules to Count the Number of Graduates	17
Establishing Rules to Count the Number of Potential Graduates	18

## **Summary of Findings and Recommendations**

Section 52052(a) of the Public Schools Accountability Act (PSAA) requires the Superintendent of Public Instruction to determine whether data are currently reported to the State which allow the creation of school-level graduation rates, student attendance rates, and staff attendance rates. If data are not currently reported, the PSAA requires the Superintendent to recommend the action necessary to implement an accurate reporting system in order to include the rates in the Academic Performance Index (API).

### **Findings**

The Superintendent has determined that the required data are neither currently collected nor available to create accurate graduation and attendance rates. Graduation rates are established by comparing the actual number of graduates to the potential number of graduates. Student attendance rates are obtained by comparing the actual attendance to the possible attendance. Staff attendance rates would require a similar comparison.

Although schools and districts currently report some of the data needed to create graduation and student attendance rates, the local education agencies do not report student-level data necessary to reliably determine the potential number of graduates or the possible days of attendance, or to allow the data to be broken down by ethnic or socioeconomically disadvantaged subgroups as required by the PSAA. There is no current collection of staff attendance data.

The only way to create reliable graduation and student attendance rates is from individual student records that include the necessary data elements. Other states' experiences substantiate this finding.

### **Recommendations**

To achieve the goal of including graduation and attendance rates in the Governor's accountability program in a cost effective and accurate way without creating redundant data systems, the Superintendent recommends utilizing the California School Information Services (CSIS) program.

CSIS is a comprehensive electronic system of statewide individual student and school-level data created by the Legislature and the Governor in 1997 and funded for development through the Fiscal Crisis and Management Assistance Team (FCMAT). When fully implemented, CSIS will provide the data necessary to produce graduation and student attendance rates for all subgroups. Staff attendance data could be added with minor adjustments.

This recommendation would require accelerated funding of CSIS to allow more districts to participate sooner than in the current plan and would require districts not yet participating in CSIS to submit CSIS-compatible student records that can be used to generate graduation and attendance rates. These records could be integrated with CSIS easily as the districts join the program.

Accelerated implementation of CSIS will also provide for more effective use of achievement data that currently compose the API. It is now only possible to create cross-sectional data comparing a class of students at a school one year with a class the next year. The individual student CSIS data will allow a “value added” approach by measuring the effect of a year of schooling on a specific group of students. This approach is by far the best model for school accountability.

The Superintendent recommends that eventually CSIS participation be mandated, as it is in other states. At this time CSIS is being implemented only as an incentive program, primarily as a result of California’s mandated cost law.

The recommended implementation and time lines for creating each of the three rates varies based on its relationship to student achievement and district and school readiness. Pages seven through ten of this report describe implementation activities and time lines in more detail.

Since the graduation and attendance rates would be used as part of an accountability program, the Superintendent also recommends establishing an annual audit of the data submitted to create the rates.

Furthermore, the Superintendent recommends that California Department of Education (CDE) staff responsible for implementing the PSAA continue to refine the recommendations through work with the PSAA Advisory Committee.

This report defines the graduation, student attendance and staff attendance rates and describes the necessary actions and time lines to establish the rates with a degree of accuracy required for use in an accountability program. The report also includes information gathered from other states that have spent several years developing similar systems. Additional work is being completed by CDE to estimate local and state costs to implement these recommendations. The estimated cost breakdowns will be provided separately as an addendum to this report by the end of this month, and they will be included in the CDE’s Budget Change Proposals (BCPs).

## Rationale for Recommendations

There now is an opportunity to build on the investment already made in CSIS and to include the additional information sought for accountability, rather than creating a new and separate data collection system. The Superintendent's recommendations to use CSIS as the primary data collection vehicle for graduation and attendance rates and to require districts not currently participating in CSIS to submit CSIS-compatible student records, are based on the following considerations.

- Data are not currently available to create accurate graduation and attendance rates.
- It is necessary to use student-level data to create accurate graduation and attendance rates.
- CSIS is already established and will provide the data needed for graduation and attendance rates for participating schools and districts.
- Other states that have created graduation or completion rates have been successful when they have statewide student-level data. They have had serious problems with data accuracy when they have attempted to use aggregate data collections.

This section of the report provides additional detail about each of these considerations.

### Current Availability of Data

Because California does not currently have access to individual student data about students' progress through high school or about attendance, the CDE is not able to create accurate and consistent school-level graduation rates or student attendance rates. Mathematically, each of these rates must be created using two numbers, the number of times the event actually occurs (graduation or attendance), divided by the potential number of occurrences.

$$\text{Rate} = \frac{\text{Actual \# of graduates or students in attendance (numerator)}}{\text{Potential \# of graduates or students in attendance (denominator)}}$$

The denominator is the problem because of the complexity of determining reliable potential numbers of graduates or students in attendance without student-level data.

CDE currently collects the number of graduates, but not the data to use as a denominator to create school-level graduation rates. Likewise, CDE collects the average number of days of student attendance, but no data for a denominator. No data are currently collected about staff attendance. Finally, even the data currently collected are not consistent with the categories of disaggregation of race and socioeconomically disadvantaged students identified in the Public Schools Accountability Act (PSAA).

### **Use of Student-Level Data**

Individual student records provide the best way to determine a school's potential number of graduates by subgroup or its potential attendance by subgroup. For example, to identify the potential number of graduates (denominator data) for a graduation rate, each high school needs a system in place to track what happens to each student between grades 9 and 12. The system must include all students who begin at the school and all those who transfer into the school. For students who leave before graduation, the school will have to determine where each student goes. To enable disaggregation, the racial/ethnic designation and socioeconomic status of each student will have to be tracked also.

Even though many high schools have student information systems in place, there is a wide variance in the type of data maintained by the systems and there are no common definitions of data fields. Most systems do not include all the data fields that will be needed to create consistent statewide graduation rates. There must be clear, standard definitions of data fields to ensure comparable data across schools.

All schools collect daily attendance data. That data is typically transferred from the initial collection forms into aggregate storage and transmittal formats that, even when electronic, rarely facilitate and commonly prevent disaggregation into units smaller than a classroom. To create disaggregated attendance rates, each of the 7,000 schools impacted by the current requirements of the API must maintain daily attendance data separately for each racial/ethnic subgroup and for the subgroup of socioeconomically disadvantaged students. An alternative would be that the school maintains individual student attendance data on an electronic system that includes all the data elements the school would need to disaggregate the attendance data.

### **Coordination with CSIS**

CSIS was first established in statute through the Budget Act of 1997. It is an incentive program, providing funds to consortia of school districts, county offices, and their software providers. The CSIS funds are used, in conjunction with local funds, to develop comprehensive electronic data systems to serve local needs; to transfer records electronically when students move; and to report required student, school, and staff data to the CDE.

CSIS will help districts expand student information systems that they already use, purchase or develop systems where they do not exist, and ensure that all systems include a minimum amount of consistently defined data for use in statewide comparisons. CSIS will also ensure that district systems provide for specific local functions, such as class scheduling; grade reporting; and maintenance of records of program participation, course completions, test results, and general demographic data. The CSIS service of electronically transferring student records will enable faster and more accurate placement of students when they move and will save districts administrative time. Finally, as districts participate in CSIS and submit student and school-level records, they will no longer have to complete and submit many of the separate state reports, including those for the California Basic Educational Data System (CBEDS) and the Language Census.

Similar to what Texas and Florida and a number of other states have already achieved, CSIS will define data elements so that data will be consistent from one district and school to another, even though districts may use different local data collection systems.

Based on CSIS projections, and assuming continued and sufficient funding, the phase-in of districts for CSIS will be complete in June of 2004. If this projection is realized, data for the graduation and attendance rates for all schools could be provided through CSIS starting in June of 2005. For districts and schools that are beginning CSIS implementation now, the CSIS central processing will be able to extract data for graduation and attendance rates sooner. On page eight of this report, the time line for creating graduation rates describes how and when graduation rate data from CSIS will be merged with data from districts not yet participating in CSIS. This is the basis for the recommendation to require districts not yet participating in CSIS to submit electronic student records.

### **Experience of Other States**

To learn as much as possible from the experiences of other states, CDE staff examined the creation of graduation and attendance rates in several of the states.

**Florida** and Texas create graduation, completion, and attendance rates by collecting standardized, individual student records at the state level and applying a consistent set of rules for counting students. Florida creates school-level graduation rates, although not by race or socioeconomic status, and uses them as part of its system for “grading” schools in its statewide voucher program. Before the initial creation and inclusion of these rates, Florida had fully implemented its statewide student information system, so the state had all the data needed to create rates. Then Florida spent a year using the data to “model” different methodologies for calculating rates. Districts were allowed to see and update their data, and Florida refined the computer programming and rules for counting students.

**Texas** creates completion rates, rather than graduation rates. It reports the rates, although the rates are not used in the state’s district and school rating system. Texas only creates the completion rates at the district level because: 1) it considers the inter-district mobility to be too high to create accurate school-level rates; and 2) it has so many different grade level configurations in its high schools that it does not believe it would be able to make the rates comparable.

A less successful method of calculating graduation rates is to create paper, or even electronic, systems for schools to report aggregate counts rather than individual student data. Unfortunately, such systems are cumbersome, extremely labor intensive, and are not likely to produce accurate data. **Pennsylvania** and Colorado have both tried to use such aggregate reporting methods to create graduation rates. Halfway through this process Pennsylvania reports significant problems with the aggregate data received, because it is so hard for schools to track the many different routes students take through high school and to report the data consistently. State officials are not confident they will be able to create accurate rates at the end of the four-year collection.

In **Colorado** the graduation rate is a cumulative or longitudinal rate that calculates the number of students who actually graduate as a percent of those who were in membership and could have graduated over a four-year period. Colorado has been collecting aggregate data on diskette or paper and the process has been very difficult and confusing. Next year the state plans to begin developing an electronic collection of individual records as the replacement source of data for creating graduation rates.

**West Virginia** has a law requiring creation of graduation rates, but it has not been done because the state does not believe it is possible to do without four years worth of individual student data at the state level. West Virginia reports the number of graduates, but not rates. **Washington** currently has mandated that dropout and graduation rates be reported by district, and legislation requiring school level rates is anticipated during the next session, in January of 2000. Washington is facing a lot of the same questions addressed in this report, but it has not decided how to define or collect school-level graduation rate data. Washington does plan to have a separate completion rate to accommodate students who pass the GED, complete Individual Education Plans for special education, and receive adult education diplomas. **Nevada** does not create graduation rates by school or district because it has high student mobility and does not believe there is a universally recognized formula that is able to account for this. **Iowa** reports numbers of graduates, but does not create graduation rates. **Tennessee, Kentucky** and **Connecticut** do not create graduation rates, but focus on dropout rates.



## **Implementation of Recommendations**

This section of the report describes how each rate would be calculated and outlines the procedures and time lines for implementing the recommended approach to data collection.

Districts already participating in CSIS would submit the required data as part of their more comprehensive student records and would not have to take any new action. For those districts not participating, CSIS would design and implement a compatible method for submitting individual student data. The districts would be required and funded to use this submission method until they became full CSIS participants, no later than the end of the phase-in period, projected as June of 2004.

For districts not participating in CSIS, this submission would only provide graduation and attendance rate reporting. The districts would not receive the more comprehensive CSIS benefits of reduced state reporting, records transfer, or enhanced local functions until they joined CSIS.

CDE is submitting a 2000-01 budget change proposal to continue and accelerate implementation of CSIS, and to fund submission of graduation and attendance rate records by non-CSIS participants. In 1999, 18 consortia of districts, county offices of education, and their software providers applied for CSIS, but the appropriation was only large enough to fund five consortia. Many more districts and schools want to participate in CSIS than available funds have allowed. Increasing CSIS participation will not only accelerate meeting the multiple goals of the program, as described on page four of this report, but will decrease costs of separate data submissions to produce graduation and attendance rates.

### **Graduation Rate: Definition**

The graduation rate is defined as the number of a school's graduates divided by the number of that same school's potential graduates. As students transfer in and out of a high school, enroll in alternative education programs, participate in special education or adult education programs, drop out, or leave without notifying the school, it becomes difficult and complex to determine which of these students to count as potential graduates. Every state that tries to create graduation rates faces these same issues and makes a common set of rules about counting these students in order to have comparable data.

This report recommends a set of such rules for California, based on seven principles, and also recommends creation of several rates that would be combined to create a single high school graduation rate. These principles, rates, and rules are outlined in appendices A, B and C.

It is also important to note that since it takes four years to track a group of students from grade 9 through graduation from grade 12, it will be four years from the time data collection starts until the data can be used to create four-year graduation rates. In the

interim, the first year of collection could provide data to create one-year rates (what happens to students between the beginning of twelfth grade and graduation). Each following year could provide an additional year's worth of data.

### **Graduation Rate: Time Line**

The Superintendent recommends that graduation rate reporting be implemented before student attendance rate reporting because: a) the graduation rate is broadly held to be an outcome of student achievement, and thus furthers the state's new accountability system more quickly; b) most high schools already have some type of electronic student information system; and c) the approximately 840 impacted comprehensive high schools is a more manageable number than the 7,000 schools that would have an attendance rate, based on the requirements of PSAA. The recommended sequence of activities is:

- **1999-2000** – Legislature establishes funding, CDE tests and refines rules for counting students (see Appendix C), CSIS establishes compatible method to submit graduation rate data;
- **2000-2001** – Non-participating CSIS districts use funds to implement CSIS-compatible method of student data submission, CSIS districts continue implementation of their consortia approved plans;
- **2001-2002** – All impacted high schools and their districts maintain data for all 9<sup>th</sup> through 12<sup>th</sup> graders in a format that will enable submission of records;
- **June of 2002** – All non-participating CSIS districts/schools submit graduation data records electronically, CSIS submits data on behalf of CSIS participants;
- **August of 2002** – The first statewide graduation rates, representing one year of data<sup>1</sup>, are available.

As data submission begins, the timing will be very important. All data must be received no later than June 30, in order to produce certified files for use in calculating the Academic Performance Index by mid-summer. This will probably require legislation with leverage to ensure timely data submission.

### **Student Attendance Rate: Definition**

The general definition of a school's student attendance rate is the total number of days all students attend school divided by the total number of days all of these same students could potentially be attending school. The problem in collecting the data is that it is very difficult for schools to determine the days of possible attendance since students may leave without notification or leave for a period of time and return weeks or months later. To avoid the difficulty of determining the last day of enrollment and facilitate school-level record-keeping, the recommended approach is to use a rate called "Average Monthly Active Enrollment."

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<sup>1</sup> If local record-keeping begins in 2001-2002, for the 2002 graduates it would only be possible to compute a one-year rate. In 2003 the data could be used to compute a two-year rate, and the first four-year rate would be available in 2005.

The numerator for this rate is the average daily attendance for all students during a month. The denominator (“active enrollment”) is the total number of students who attend for at least one day during the same month. By having access to student-level data, it will be possible to disaggregate these rates by racial/ethnic subgroup and for the subgroup of socioeconomically disadvantaged students.

### **Student Attendance Rate: Time Line**

The Superintendent recommends the same data collection approach as for graduation rates, but with a longer time line. This longer time will accommodate the many elementary schools and districts that do not have student information or electronic attendance systems with individual student records that can be used to prepare and submit CSIS-compatible data. It will also provide time for more districts to be funded through CSIS, thus reducing the need for separate data submission systems. The recommended sequence of activities is:

- **2000-2001** – Legislature establishes funding, CSIS establishes compatible method to submit student attendance rate data;
- **2001/02-2003/04** – Based on available funds, CSIS adds new districts, CSIS districts continue implementation of their consortia approved plans, non-participating CSIS districts use funds to implement CSIS-compatible method of student data submission<sup>2</sup>, and CDE communicates with these districts and provides training to ensure understanding of new requirements;
- **2003-2004** – All impacted schools and their districts maintain daily attendance data for all students in a format that will enable submission of records;
- **May of 2004** – All non-participating CSIS districts/schools submit attendance data records electronically; CSIS submits data on behalf of CSIS participants;
- **August of 2004** – The first statewide student attendance rates are available.

### **Staff Attendance Rate: Definition**

The recommended definition of a staff attendance rate is the total number of days all certificated staff worked at the school divided by the total number of days that these same staff were assigned to work at the school, based on their contracts. Local contracts would essentially guide the way days are counted, and all work days would be included, so differentiation of student days would not be necessary.

The statutory language referencing staff attendance rates is “...attendance rates for...certificated school personnel for elementary schools, middle schools, and secondary schools...” Based on this, the recommended staff attendance rate includes all certificated personnel assigned part-time or full-time to the school, not just teachers or staff providing direct instruction to students. Since the intent of disaggregation of data is to ensure that all groups of students are making academic progress, there is no recommendation that the disaggregation categories be applied to certificated staff.

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<sup>2</sup> This is the primary reason for assigning a two-year time frame to this activity. The time is needed to make responsible decisions about adopting or purchasing a system, to install and test it, and to train staff who will use it.

**Staff Attendance Rate: Time Line**

The Superintendent recommends a slightly different approach for collecting data for staff attendance rates. Again, over the long term this collection should be done through CSIS. Currently CSIS includes a staff record, but since no data related to staff attendance are collected, there are no attendance fields in the record. CSIS should add these fields, or data elements.

In the short term this could be a paper data collection for non-CSIS participants, either as an addendum to a current collection or a separate collection. Since staff data would not be disaggregated by any subgroups, this rate is significantly less complex and less susceptible to errors of local aggregation. Most districts already have electronic human resources systems that could be modified to produce this data, so the paper reporting for non-CSIS participants would be a relatively straightforward and inexpensive interim process until CSIS is fully implemented. The recommended sequence of activities is:

- **1999-2000** – Legislature establishes funding, CDE tests and refines rules for counting staff attendance days, and CSIS adds data elements for staff attendance and gets approval from State Board of Education;
- **2000-2001** – Non-participating CSIS districts use funds to modify human resources systems to maintain staff attendance data, CSIS districts modify their systems to include new staff attendance data elements;
- **2001-2002** – All impacted schools and their districts maintain staff attendance data for each certificated staff assigned to an impacted school;
- **May of 2002** – All non-participating CSIS districts/schools submit aggregate staff attendance data by school, CSIS submits data on behalf of CSIS participants;
- **August of 2002** – The first statewide staff attendance rates, representing one year of data, are available.

## **Audit of Data**

Since the graduation and attendance rates will be used as part of an accountability program, the Superintendent recommends establishing an annual audit of the data submitted to create the rates. This audit should be part of the current annual audit process in accordance with the *Standards and Procedures for Audits of California K-12 Local Educational Agencies (the audit guide)* published by the State Controller's Office.

The contents of the audit guide are developed with input from the Department of Finance, the California Society of Certified Public Accountants, local educational agencies, and CDE. The guide contains specific compliance steps to audit financial information as well as some supplemental data. The audit reports are due to the state by December 15 after the close of each fiscal year.

The audit should cover the reported data on high school graduation rates, student attendance rates, and staff attendance rates by adding procedures to the audit guide. CDE would provide required procedures to verify the data in the state compliance section of the audit guide. The estimated costs for this expansion of the audit process will be included in the addendum to this report.

## **Appendix A: Principles for Establishing a High School Graduation Rate**

These principles are intended to guide the rules for calculating high school graduation rates. It would be easy to create graduation rates if each student who started ninth grade stayed in the same high school until he or she graduated, but this is far from the case in California. In some parts of the state, mobility is so high that less than half the original ninth grade class begins twelfth grade at the same school three years later. As population shifts occur, schools are closed, new schools are opened, and school boundaries shift. Some schools house unique programs or special populations of students that could have a significant impact on graduation rates. All of these are factors in trying to create fair and accurate graduation rates at the school level.

### **Principles Related to Determining the Number of Graduates**

These two principles are specifically related to how students are counted as graduates in the numerator of the graduation rate.

#### **1. The definition of a graduate should correspond to general public perception of what a graduate is.**

The general public has an understanding of what a high school graduate is, and in general this corresponds to having received a high school diploma. This definition should only be extended in limited and justifiable circumstances.

#### **2. There should be some value attributed to alternative methods of completing a high school education that may not result in a high school diploma.**

Some students, while unable to obtain a diploma, have successfully completed a course of study that resulted in an alternative certification or equivalency. This accomplishment should be recognized, to a lesser degree than a diploma, but as a means of encouraging continued services to all students.

### **Principles Related to Determining the Number of Potential Graduates**

The most difficult aspect of defining a high school's graduation rate is determining which students the school should be held accountable for graduating. In the definition of the rate this is the number of potential graduates. The decision rules in Appendix C are the proposed instructions for how these students are to be counted. The following principles have been used to create these rules and to help make judgements when a single rule could not meet all the principles. It is important to note that while each principle is fairly easy to embrace, there are immediate conflicts between and among them when we attempt to apply them to specific situations that exist in schools. Each principle has to be considered in light of the others and the recommended rules reflect this approach.

- 1. All students should be included as potential graduates. The entity accountable for the graduation of each student should be identified.**

The rules for counting students should ensure that all students in a graduating class are counted in some school's or institution's graduation rate. While there may be legitimate reasons to exclude a student from a school's count, those instances should be kept to a minimum and only applied to meet other principles. If large numbers of students are not included in school graduation rates, the rates will lose accuracy and credibility and those students may not receive maximum educational services and opportunities.

- 2. The graduation rate should be “fair” across schools and portray a reasonably accurate picture of what is happening at individual schools.**

A school should have an adequate amount of time to graduate the students for which it is held accountable, including the opportunity to assess incoming students, determine appropriate services, and provide those services prior to time of graduation. The rate should not “penalize” a school for students who take less or more than four years to graduate. Logistics such as boundary changes and placement of special programs at sites, based on available space or access to unique services, should not significantly impact a school's graduation rate.

- 3. The calculation of a graduation rate should correspond to general public perception of what a graduation rate is.**

The general public has an understanding of what a graduation rate is, including a sense of which students should be counted in such a rate. Complex formulas or counting students in ways that do not make sense to the public should be avoided.

- 4. The calculation of a graduation rate should not create incentives that negatively impact the education and graduation of students.**

Depending on the rules for counting students in a school's graduation rate, there may be an incentive to move or encourage students to move out of the school if they are unlikely to graduate. Research demonstrates that students who change schools during high school, even within the same district, are much less likely to graduate. Another potentially negative incentive is that districts might be tempted to lower graduation standards or schools might be tempted to lower course-passing standards to increase the number of graduates. While it may not be possible to create a school graduation rate without creating some negative incentives, it is important to consider this thoughtfully and provide enough flexibility to alter calculation of the rate over time if there are serious negative incentives.

**5. Maintaining and submitting local data to create graduation rates should not impose substantial new record-keeping and reporting requirements that have no other application than to establish a graduation rate.**

In order to create graduation rates to use for accountability, schools will have to keep track of what happens to individual students from at least the beginning of ninth grade until high school graduation or some other event that indicates how to report the student for this purpose. This means tracking the status of students who enter the school at the beginning of high school, and students who enter the school later, as well as establishing the status of students who leave high school early.

Schools already participating in the CSIS program will have their data reported through CSIS, and no other actions will be necessary. Other schools will have to create or modify procedures and electronic student information systems to produce the data. While it will be impossible to avoid these burdens in order to collect graduation rate data, minimizing the burden is still an important consideration and should be valued in establishing rules for counting students.



## **Appendix B: Application of the Principles to Create Multiple Graduation Rates**

Because of conflicts between and among the principles described in Appendix A, a single formula graduation rate would not provide a fair and accurate description for accountability. Several different rates, which could be calculated and used together, are described below. The recommendation is to use all of these rates in creating a single high school's graduation rate, with final determination about use and weighting of the rates made by the PSAA Advisory Committee and State Board of Education, following consideration of the accuracy and reliability of the data.

An additional note about graduation rates is that a group of researchers<sup>3</sup> has recommended an alternative method of establishing a high school graduation rate that does not allow any movement of students out of the denominator if they transfer to another school. CDE considered this method, but rejected it because it was counter to several principles and appeared to value minimizing mobility above counting potential graduates. It also was not consistent with the definition of graduation rates in other states.

### **High School Graduation Rate**

The graduation rate is the basic rate for comprehensive high schools with more than 100 students. It would be defined as the number of graduates divided by the number of potential graduates. The recommended rules for counting students for both the numerator and the denominator are in Appendix C.

### **High School Completion Rate**

The completion rate is an expansion of the high school graduation rate to include students in the numerator who meet some type of high school equivalency requirement. At this time the completion rate would include General Educational Development (GED) test passers, though other legitimate categories of high school "completers" could be added as they are identified for statewide inclusion.

### **District Graduation and Completion Rates for Special Population Students**

The district graduation and completion rates for special population students are district-wide rates for all special education, adult education and alternative education students. In developing rules for counting students for an individual high school's graduation rate, it does not seem reasonable to hold only a single school accountable for special populations of students who might be located at the school based primarily on available services or facilities.

Florida creates a similar district rate for adult and alternative education students. Special education students are included in the school rate because Florida, unlike California, has a special education diploma, which qualifies the recipient students to be counted as graduates.

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<sup>3</sup> Russell W. Rumberger, Katherine A. Larson, Robert K. Ream, Gregory J. Palardy, "The Educational Consequences of Mobility for California Students and Schools," vol. 1, no. 1, May 1999, *PACE Policy Brief*, p. 10.

**District Graduation and Completion Rates for Late Entry Students**

The district graduation and completion rates for late entry students are district-wide rates for all students who enter any school in the district after the end of the second week of twelfth grade. This is another category of students for whom it does not seem reasonable to hold only a single school accountable.

The district graduation and completion rates, both for special populations and for late entry students, would include only students not already counted in a school rate. If the numerators and the denominators for the district and all the schools were added together, the totals would reflect virtually all students who graduated and all potential graduates in the district.

## Appendix C: Application of the Principles to Create Rules for Counting Students in the Graduation Rate

To create comparable graduation rates, California needs to be precise about how to count students. There are many different school and district structures and different ways students move through these structures. Without precision about how to track and report students, the data submitted will not be consistent, and California will not be able to use the data to create defensible rates. Every state that creates graduation rates has faced this same issue and has developed a set of rules for counting students in both the numerator and denominator.

The following rules for counting students are recommended as a starting point for defining the components of a graduation rate. These rules are derived from the principles in Appendix A. There was also careful consideration of the work of other states, particularly Florida's rules for counting students in its school-level graduation rates and Texas' rules for establishing its district completion rates.

Each recommended rule is followed by a valence table indicating the relationship of the rule to the principles. The assignment of values in the table is subjective, based on the input of a small work group. "High adherence" means that the group believes the rule strongly supports the principle and "low adherence" means that the group believes the rule is not consistent or not substantially consistent with the principle. The point is that no set of rules will fully support all the principles, and no system will be perfect from everyone's perspective.

Assuming the decision is made to proceed with collecting the data to create graduation rates, there may be problems or inconsistencies in the initial collection(s), and the rules may need revision. This is common with any large data collection and has occurred in other states under similar circumstances.

### Establishing Rules to Count the Number of Graduates

#### 1. Students Who Receive a High School Diploma

**Recommendation:** Include these students in the count of the school's graduates, as long as they are also included in the denominator.

Principle	Low adherence	Medium adherence	High adherence
Reasonable to public			X
Values alternative completion		N/A	

#### 2. Students Who Pass the California High School Proficiency Exam (CHSPE)

**Recommendation:** Include these students in the count of the school's graduates, as long as they are also included in the denominator. California law states that the CHSPE is fully equivalent to a high school diploma. CDE sets the passing score on the exam and equates it to the average performance of a high school senior. A budget change proposal to develop a test in reading, writing, math, history, and science based on California standards has been

submitted to the Department of Finance (DOF). With its approval, test development can begin to align the CHSPE to the state's content and performance standards.

Principle	Low adherence	Medium adherence	High adherence
Reasonable to public		X	
Values alternative completion			X

### 3. Students Who Pass the General Educational Development (GED) Test

**Recommendation:** Do not include these students in the count of the school's graduates, but do include them in the numerator of the school's completion rate. The GED is not standards based and California has no control over the content of the test or the passing score. The test is limited to testing proficiency in the basic skills. There is general agreement among educators that it is considerably easier to pass the GED than to earn a high school diploma.

Principle	Low Adherence	Medium Adherence	High adherence
Reasonable to public	X		
Values alternative completion			X

### 4. Students Not Counted in the Number of Potential Graduates Recommendation:

Do not count any students as graduates if they are not also counted as potential graduates in the school's graduation rate. Any student counted in the numerator should also be counted in the denominator.

Principle	Low adherence	Medium adherence	High adherence
Reasonable to public			X
Values alternative completion		N/A	

## Establishing Rules to Count the Number of Potential Graduates

### 1. Students Who Enter High School Late

**Recommendation:** Include all students who enter the high school before the end of the second week of 12<sup>th</sup> grade. For students who enter the school later in the 12<sup>th</sup> grade, include them in a separate district rate for late entry students. Include the district rate as one of the factors in each school's API to avoid an incentive to limit services to late entry students.

Principle	Low adherence	Medium adherence	High adherence
Includes all students		X	
Fair and accurate to schools			X
Reasonable to public		X	
Does not create negative incentives			X
Avoids extensive new record keeping		X	

## 2. Students Who Leave School Early, Without Receiving a Diploma, and

### a) Whose attendance at another public or private school in the district or state is verified.

**Recommendation:** Include these students in the count for the new school or district and exclude them from the count of the school they left.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools			X
Reasonable to public			X
Does not create negative incentives	X		
Avoids extensive new record keeping	X		

### b) Whose attendance at another public or private school in the district or state cannot be verified.

**Recommendation:** Continue to count these students in the school they left. This is common practice in other states and avoids losing potentially large numbers of students from counts.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools	X		
Reasonable to public		X	
Does not create negative incentives			X
Avoids extensive new record keeping	X		

### c) Who move to another state or country.

**Recommendation:** Exclude these students from the count at the school they left, as long as there is verification from a responsible adult that the student has left the state. This is common practice in other states and a requirement to track students beyond state lines would require extensive record keeping.

Principle	Low adherence	Medium adherence	High adherence
Includes all students	X		
Fair and accurate to schools			X
Reasonable to public		X	
Does not create negative incentives	X		
Avoids extensive new record keeping		X	

**d) Who enroll in and attend community college or become early college admission students.**

**Recommendation:** Include these students in the count of the school they leave. If they pass the GED, they may also be counted in the numerator of the completion rate, though not the graduation rate. There are very few of these students, and most of them are students who drop out of high school and later enroll in a community college.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools	X		
Reasonable to public		X	
Does not create negative incentives			X
Avoids extensive new record keeping	X		

**e) Who enter an adult education program in the district.**

**Recommendation:** Include these students in the district rate for special population students and exclude them from the count for the school they leave. If these students pass the GED, they may also be counted in the numerator of the completion rate, though not the graduation rate.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools			X
Reasonable to public		X	
Does not create negative incentives	X		
Avoids extensive new record keeping	X		

**f) Who enter an alternative education program in the district.**

**Recommendation:** Until a decision is made about graduation rates for alternative schools, include these students in the district rate for special population students and exclude them from the count for the school they leave. If these students pass the GED, they may also be counted in the numerator of the completion rate, though not the graduation rate.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools			X
Reasonable to public		X	
Does not create negative incentives	X		
Avoids extensive new record keeping	X		

- g) **Who enter an institution that is not primarily academic (military, job corps, justice system, etc.) and are in a secondary program leading toward a high school diploma.**  
**Recommendation:** Exclude these students from the count of the school they leave. This is consistent with the current rules for counting dropouts, and there are very few of these students.

Principle	Low adherence	Medium adherence	High adherence
Includes all students	X		
Fair and accurate to schools			X
Reasonable to public		X	
Does not create negative incentives		X	
Avoids extensive new record keeping	X		

- h) **Who enter an institution that is not primarily academic (military, job corps, justice system, etc.) and are not in a secondary program leading toward a high school diploma.**  
**Recommendation:** Include these students in the count of the school they leave. This is consistent with the current rules for counting dropouts.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools		X	
Reasonable to public			X
Does not create negative incentives		X	
Avoids extensive new record keeping		X	

- i) **Who do not enter an educational program leading toward a diploma (job, marriage, etc.).**  
**Recommendation:** Include these students in the count of the school they leave. This is consistent with the current rules for counting dropouts.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools			X
Reasonable to public			X
Does not create negative incentives			X
Avoids extensive new record keeping		X	

### 3. Students Who Complete Eighth Grade but Don't Enter Ninth Grade

**Recommendation:** Begin monitoring progress toward graduation at the beginning of ninth grade, rather than after completion of grade. There is a significant additional record-keeping burden to monitor progress of students after completion of 8<sup>th</sup> grade.

Principle	Low adherence	Medium adherence	High adherence
Includes all students	X		
Fair and accurate to schools			X
Reasonable to public		X	
Does not create negative incentives		X	
Avoids extensive new record keeping		X	

### 4. Students Who are Served by Special Education Through an IEP

**Recommendation:** Include these students in the district rate for special populations and exclude them from the count of students at the school. Special education programs are often housed at a school site based on facilities, accommodations, and other factors, so the students may be spread unevenly across a district's schools. If the graduation rate for special education is not handled differentially, as described here, there will be a strong incentive for schools to try to move these programs off their campuses.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools			X
Reasonable to public		X	
Does not create negative incentives		X	
Avoids extensive new record keeping		X	

### 5. Students Who Are Retained, Skipped a Grade, Took an Extra Year, or Moved to a Different Graduating Class

**Recommendation:** Include these students in the counts for the new graduating class and exclude them from the counts of the former graduating class.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools			X
Reasonable to public		X	
Does not create negative incentives		X	
Avoids extensive new record keeping	X		



## 6. Students Who Are Expelled

**Recommendation:** Include these students in the school from which they are expelled, unless their attendance at another public or private school is verified.

Principle	Low adherence	Medium adherence	High adherence
Includes all students			X
Fair and accurate to schools		X	
Reasonable to public		X	
Does not create negative incentives		X	
Avoids extensive new record keeping		X	

## 7. Foreign Exchange Students

**Recommendation:** Exclude foreign exchange students from both the numerator and denominator of the high school graduation rate. These students are in this country on a temporary basis and will be graduating from their home country's school system.

Principle	Low adherence	Medium adherence	High adherence
Includes all students		N/A	
Fair and accurate to schools			X
Reasonable to public			X
Does not create negative incentives			X
Avoids extensive new record keeping			X

## 8. Students Who Die

**Recommendation:** Exclude these students from the school's rate and do not include them elsewhere.

Principle	Low adherence	Medium adherence	High adherence
Includes all students		N/A	
Fair and accurate to schools			X
Reasonable to public			X
Does not create negative incentives		N/A	
Avoids extensive new record keeping		X	